

9. SAP SUCKING BY INDIAN WOODPECKERS

(With a photograph)

Readers will be interested to see the accompanying photograph of an apple tree (*Pyrus malus*) in the middle of a lawn, taken at the Chasme Shahi Gardens in Srinagar (5000 feet), Kashmir, on 21 July 1967. The lines of dark spots represent small holes dug into the bark in rings round the stem at regular intervals of a few inches along the whole height.



The first impression was that this was the work of an idle schoolboy, but this was dismissed in consideration of the magnitude of the work, its commencement at almost ground level, and its extension far out of his reach. We were discussing the possibility of its being a woodpecker, when a gardener joined in and confirmed our suspicions. I had a vague recollection of having seen a photograph of such holes and the name of the American Sapsucker was suggestive, but I could not recall any reference to sap-sucking in India. The HANDBOOK OF BRITISH BIRDS

(1938, 2 : 277 and 285) refers to rare instances in Britain of *Picus viridis* (doubtfully) and *Dryobates major* (certainly) ringing trees with series of regularly-spaced pits after the fashion of the American Sapsuckers (*Sphyrapicus*). In Indian literature I have only been able to find A. E. Osmaston's note 'Curious habits of Woodpeckers in the Kumaon Hills' (1916, *J. Bombay nat. Hist. Soc.* 24 : 363-366). As this would not be easily accessible to most members, I reproduce portions of it :

'Those who know the hill forests of Garhwal may have noticed at one time or another rows of small neat holes made in lines across the stems of trees. They may be seen at any height up to at least 30 feet from the ground and the rows are nearly always quite horizontal. Each row consists of perhaps a dozen holes, half an inch or so apart, and the rows may be any distance down to a few inches one above the other. Often the distance apart is repeated with remarkable accuracy and in this case the rows are not separated as a rule by more than 6 to 8 inches. The holes themselves are more or less rounded and about $\frac{1}{4}$ to $\frac{1}{3}$ inch across in section and they invariably pierce through the bark to at least half its thickness, but never in any circumstances enter the woody tissue beneath.

For the last few years I have been endeavouring to discover what it is that forms these holes and why they are formed. A general answer to the first question is fairly easily given.

The holes are undoubtedly formed by woodpeckers. The species of woodpecker responsible for this work of art and what this objective may be are questions not so easily disposed of.

If these holes be examined it will be found that they only occasionally show signs of recent attack. In by far the majority of cases the holes have been made some months or years previously and do not show any obvious signs of having been tampered with since. Such holes may extend only half way through the bark, but more frequently they extend right down to the delicate cambium layer separating the cortical from the woody tissue. Again, some of them will be found empty whilst others will contain a core of secondary growth tissue which may have completely filled up the lower half of the original cavity. This tissue is usually soft and spongy and sometimes tinged green. Where no such core of secondary tissue is present the bottom of the hole may contain a soft fungal growth which is usually white.

In some cases, however, the holes show signs of a recent visit. This is recognised by evidence of a fresh incision into the secondary growth tissue at the base of the cavity.'

Osmaston goes on to list separately the trees most frequently (including *Pyrus pashia*) and occasionally attacked such trees being found between 6000 ft. and 10,000 ft. but usually between 6500 ft. and 7500 ft. He had no evidence that any of the eight possible species of woodpeckers

listed by Blanford makes the holes or that any other does not. He notes that the Rufousbellied Pied Woodpecker *Hypopicus hyperythrus* (which, incidentally, Ripley calls a sapsucker in the SYNOPSIS) systematically visits such holes and suggests that this is one, if not the sole, perpetrator. When concluding, Osmaston suggests that the holes are made horizontally (he does not refer to rings round the stem?) merely because the bird finds it more convenient to work sideways rather than upwards or downwards.

My first impression also was that the boring was for insects, but I am inclined to think that the distance between the rows is an index of the size of the bird—each row serving as a foothold for working on the next. The bark of the apple trees on which I found this pitting was smooth, unlike the rough bark on which woodpeckers usually hunt for insect food. The possibility that strikes me is, therefore, that the woodpecker starts the pecking at a level where some foothold is available and then works upwards using each ring of pits as a foothold for making the next ring. Osmaston's suggestion about *H. hyperythrus* being the maker of such pits is strengthened by its having a brush-like tip to its tongue, but as regards the locality in which I noticed the pitting I do not know if this species could have been responsible as it is not mentioned for this area in Bates & Lowther's BREEDING BIRDS OF KASHMIR (1952), the woodpeckers listed being *Picus squamatus*, *Dryobates himalayensis* and *Dryobates brunneifrons*, the last of which I noticed in the neighbourhood.

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10. OCCURRENCE OF THE HOUSE MARTIN, *DELICHON URBICA* (LINN). IN SAURASHTRA, GUJARAT

On 3 April 1967, Y. S. Shivraj Kumar of Jasdan and myself were walking in the evening on the dam of the Jasdan tank when we saw quite clearly the House Martin (*Delichon urbica*), a single bird, hawking with swallows, crag martins, and swifts. The House Martin had a forked tail and was easily recognizable by the long white patch on the rump and upper tail coverts and also its pied head pattern. We looked up 'Birds of Gujarat' by Sâlim Ali (1954)¹ in which he mentions this bird

¹ *J. Bombay nat. Hist. Soc.* 52 : 375.